

The present invention relates to a novel diagnostic method for the detection of infertility in males. In particular, the present invention relates to a diagnostic method for detecting the presence or absence of a mutation or mutations in the *POLG* gene encoding mitochondrial DNA polmerase in a biological sample. The invention relates also to the use of a mutant *POLG* gene in the detection of infertility in males and in the screening of human populations for the presence of such mutation or mutations as a predictive test for male infertility. The invention also relates to the use of the *POLG* gene as an indicator of other pathological conditions associated with or related to male infertility, including those manifesting in women.

